AMES LABORATORY 60 1947 • 2007

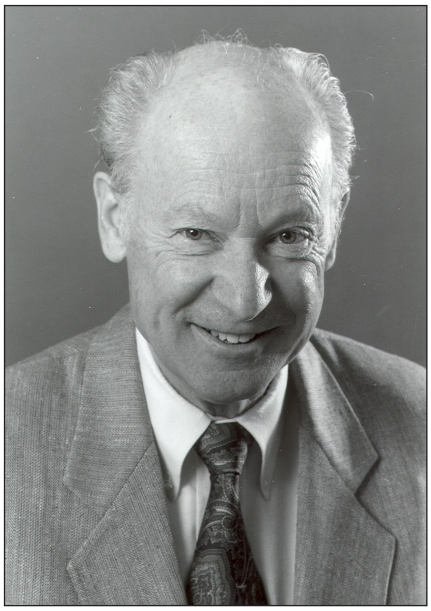
INSIDER

Newsletter for the Employees of Ames Laboratory ■ Volume 18, Number 2 ■ February 2007

"Quite an Honor"

Karl Gschneidner named to National Academy of Engineering

One wall of Karl Gschneidner's Spedding Hall office is chock-full of honors and awards the Ames Laboratory senior metallurgist has received throughout his distinguished career. But he'll soon have to make room for the biggest honor of them all — the one that names him as a member of the National Academy of Engineering. Gschneidner was one of 64 American researchers and nine foreign associates inducted into the prestigious Academy earlier this month.



"It's quite an honor, considering all the competition," he says. "There are a lot of good people out there, so I'm glad we made it!"

The National Academy of Engineering is one branch of the National Academies organization that also includes the National Academy of Sciences, the Institute of Medicine and the National Research Council. Established in 1964, the NAE has a fairly exclusive membership with only 1,945 Americans and 184 foreign associates inducted in its 43-year history.

Academy membership honors those who have made outstanding contributions to "engineering research, practice or education, including, where appropriate, significant contributions to the engineering literature," and to the "pioneering of new and developing fields of technology, making major advancements in traditional fields of engineering or developing/implementing innovative approaches to engineering education."

Gschneidner was specifically cited for "contributions to the science and technology of rare-earth materials," a further acknowledgment of his role as one of the world's foremost authorities in the physical metallurgy and thermal and electrical behaviors of rare-earth materials. An Ames Lab researcher and Iowa State University faculty member since 1963, he became the first director of Ames Lab's Rare-Earth Information Center when it was established in 1966. He has published over 500 papers in the field, and his research in magnetic refrigeration is widely recognized throughout the world.

Gschneidner is also a Fellow of the American Society for Materials International, The Minerals, Metals and Materials Society and the American Physical Society. He is an honorary member of the Materials Research Society of India and The Japan Institute of Metals.

He is the fourth Ames Laboratory researcher named to the National Academy of Engineering and only the sixth overall with ISU ties. He joins Ames Lab's nondestructive evaluation program director and fellow Anson Marston Distinguished Professor Bruce Thompson, associate researcher Dan Schectman (materials chemistry and biomolecular materials), and retired researcher Donald Thompson (nondestructive evaluation). Senior chemist John Corbett is a member of the National Academy of Sciences.

While he was aware he'd been nominated for the Academy, Gschneidner said his actual election was a surprise. However, he doesn't expect the "fame" to necessarily be followed by fortune.

"People have asked me if this means I'll be getting the big bucks," he says. "Actually, it's going to end up costing me $200 a year for the membership," though he adds with a chuckle that he'll get a discount because of his age (he turns 77 in November).

And don't expect him to rest on his laurels. He still maintains a full schedule, splitting his time between the research lab, the library and the lecture circuit.

"I plan to keep doing the same things — looking for new things and trying to figure out what makes them work," he says. "It's what keeps me young."

He also credits those working with him, particularly senior scientists Vitalij Pecharsky and Alan Russell in recent years, for much of his success.

"It's like an orchestra conductor or the manager of a ball team," he explains. "They often get the credit, but without all those talented people around them, they wouldn't get far. I've been fortunate throughout my career to be surrounded by top-notch people and to have a wonderful, supportive, and understanding wife." ■

~ Kerry Gibson

Goldman Named Ames Lab/IPRT Interim Director

Bruce Thompson to chair director search committee

Alan Goldman has been named interim director of the Ames Laboratory and the Institute for Physical Research and Technology, or IPRT, at Iowa State University. Goldman is currently the division director of Science and Technology at Ames Laboratory. Goldman's appointment is effective March 1, 2007.

Goldman became an Ames Laboratory division director in September of 2004. Prior to that, he was chairman of the ISU Department of Physics and Astronomy from 1999 to 2002 and also served as the interim director of the ISU International Institute of Theoretical and Applied Physics.

Goldman began his career at ISU and Ames Laboratory in 1988 as an assistant professor in physics and an Ames Lab associate physicist. He was an associate scientist at Brookhaven National Laboratory from 1984-1988.

Goldman's background is in X-ray- and neutron-scattering techniques for the study of the structure and dynamics of condensed matter. Since 1994, he has been the director of the Midwest Universities Collaborative Access Team, a group of scientists from eight universities and one German institute. Under his leadership, MUCAT set up an undulator beam line in the Advanced Photon

Alan Goldman

Source at Argonne National Laboratory to study materials and their properties.

Goldman replaces Tom Barton, who plans to return to ISU's chemistry faculty at the end of February. Barton has served as director of the Ames Laboratory since 1988 and IPRT since 1998.

A 14-member search committee has been established to find a successor to Barton. The committee is chaired by Bruce Thompson, Distinguished Professor of materials science and engineering and director of the Center for Nondestructive Evaluation.

John Brighton, vice president for research and economic development, said he hopes the next Ames Laboratory director will be named by August 1, 2007.

Members of the search committee are:

- Bruce Thompson, Chair, Distinguished Professor, materials science and engineering; director, Center for Nondestructive Evaluation; Ames Laboratory program director of Nondestructive Evaluation
- Iver Anderson, adjunct professor, materials science and engineering; Ames Laboratory senior metallurgist; interim program manager, IPRT Technology Commercialization Group
- Diane Birt, Distinguished Professor, food science and human nutrition
- Cynthia Jenks, scientist, chemistry; Ames Laboratory senior scientist
- Mark Kushner, dean, College of Engineering
- Richard LeSar, professor and chair, materials science and engineering
- Surya Mallapragada, professor, chemical and biological engineering; Ames Laboratory program director of Materials Chemistry and Biomolecular Materials
- Jake Petrich, professor and chair, chemistry
- Eli Rosenberg, professor and chair, physics and astronomy
- Costas Soukoulis, Distinguished Professor, physics and astronomy; Ames Laboratory senior physicist
- Patricia Thiel, Distinguished Professor, chemistry; Ames Laboratory senior chemist
- Michael Whiteford, dean, College of Liberal Arts and Sciences
- Ed Yeung, Distinguished Professor, chemistry; Ames Laboratory program director of Chemical and Biological Sciences
- Chitra Rajan, associate vice president for research ■

~ Steve Karsjen

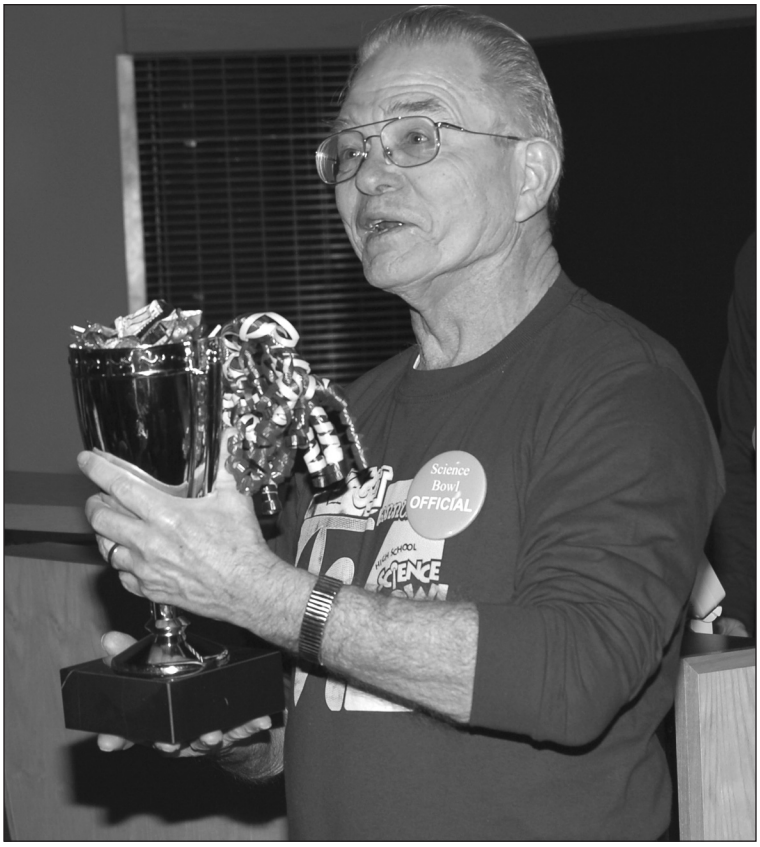
Public Affairs wins CASE awards

Ames Laboratory Public Affairs' staff won two awards in the 2007 CASE District VI awards competition. The Council for Advancement and Support of Education is an international association of professionals who advance educational institutions. The first award, a Silver award for Excellence in Institutional Relations, was won for the Ames Lab/ISU Middle School Science Bowl. The award went to Steve Karsjen, Deb Samuelson, Saren Johnston, Kerry Gibson, Robert Mills, Grant Luhmann, Rocky Dunkin and Brandy Rowe. The second award, a Bronze award for Excellence in Science Writing, was won by Saren Johnston for the story, "Fast Backward Motion," which appeared in the 2006 issue of *Inquiry.*

Science Bowl Volunteers Honored

Science Bowl volunteers Jim Anderegg, Cynthia Feller and Steve Karsjen celebrated 10 years of service at the 2007 Ames Laboratory/Iowa State University High School Science Bowl in January. Director Tom Barton awarded the volunteers with 10-year Science Bowl pins during the opening ceremonies of the competition.

Moments later, Dr. Barton himself was presented with a special (and surprise) Champion of Education award in appreciation of his outstanding support of Science Bowl and Lab's other educational programs.



Director Tom Barton accepts his Champion of Education award during the High School Science Bowl opening ceremonies.

THANKS!

A big thank-you goes out to the following volunteers for their generous support of the 2007 Ames Laboratory/ISU High School Science Bowl. Your dedication and assistance are vital to the success of this excellent program that recognizes students who excel in math and science.
Lara Alowonle

Jim Anderegg
Iver Anderson
Kyle Anderson
Vladimir Antropov
Iryna Auferonak
Laura Barker
Tom Barton
Diane Bassham
Amy Bergerud
Jerry Berntson
Jim Brazelton
Jason Britson
Liz Brooks
Sergey Budko
Chelsea Clinton
Deb Covey
Ann Culver
Mikhail Drob
Deepak Dibya
Cynthia Feller
Dana Frits
Lindsey Gereszek
Breehan Gerleman
Kerry Gibson
Alan Goldman
Jean Goodloe
David Grant
Ashley Grimes
Heidi Hageman
Connie Hargrave
Lee Harker
Bruce Harmon
Denise Hix
David Hoffman
Jace Indrelie
Malika Jeffries -El
Cynthia Jenks
Saren Johnston
Dan Jones
Paul Kapke
Steve Karsjen
Mike Krapfl
Matthew Kramer
George Kraus
Kay Lampe Hannasch
Katherine Lawler
Eugene Levin
Heather Lewin
Tom Lograsso
Leigh Ann Long
Mark Maffett
Kimberly Meier
Bradley Miller
Bob Mills
Jessica Moraniec
Maziar Motahari
Lynne Mumm
Diane Muncrief
Mark Murphy
Tracey Pepper
Yamille Perez
Ellen Price
Kelsey Prihoda
Adam Rasmussen
Christy Reed
Rob Reed
Korin Reid
Jameson Sabin
Deb Samuelson
Sarah Shiley
Alex Smith
Sarom Sok
Mike Stahr
Michelle State
Bailey Steinfadt
Anne Stockdale
Yuly Suvorov
Pat Thiel
Bruce Thompson
Amanda Toomey
Allison Tyler
Connie Vaclav
Stan Welp
Sara Whipple
Cassandra Wright
Min Xu
Edward Yu

Barbara Lykins, director of Community Resources for the Iowa Farm Bureau, presents Steve Karsjen, Science Bowl coordinator, a check for $500 for the 2007 Science Bowl. Iowa Farm Bureau is the latest sponsor to donate money to support Science Bowl.

New Employees

Lonnie Crosby, Postdoctoral Fellow (Theresa Windus)
Xikui Fang, Postdoctoral Fellow (Paul Koegerler)
Breehan Gerleman, Communications Specialist II (Steve Karsjen)
Christopher Johnson, Predoctoral Associate (Brett Bode)
Tae Wan Kim, Postdoctoral Fellow (Victor Lin)
Kara Kirkhart, Auditor II (Fran Dunshee)
Takeshi Kondo, Postdoctoral Fellow (Adam Kaminski)
Heather Netzloff, Postdoctoral Fellow (Theresa Windus)
Niraj Kumar Singh, Postdoctoral Fellow (Vitalij Pecharsky)

Second Straight Science Bowl Win for Iowa City Regina

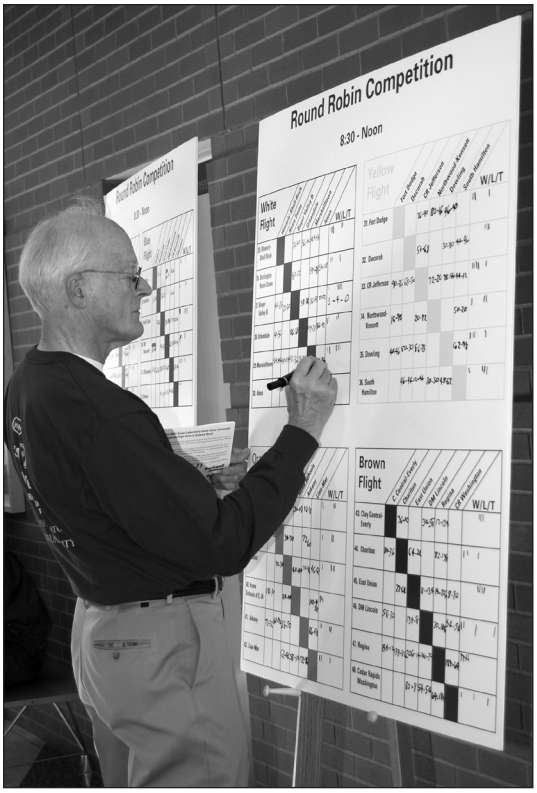
Defending champ tops Central Academy to advance to National Science Bowl

Twice was just as nice as Iowa City Regina defeated Des Moines Central Academy on Jan. 27 to win the Ames Laboratory/Iowa State University High School Science Bowl for the second straight year. After placing first in their flight in the round-robin morning competition, Regina advanced to the Sweet 16 afternoon tournament and defeated Ottumwa, Ames and Homeschools of Iowa, only to fall in their first meeting with Central Academy in the quarterfinals. Regina was sent to the challenger bracket, but fought back with a win over Linn-Mar of Marion to earn an opportunity for a rematch with Central Academy in the championship round.

Regina came out on top with a 110-22 win in the championship match. But since it was Central Academy's first loss in the double-elimination tournament, Regina and Central Academy met in a second championship match to decide the title. Regina once more defeated Central Academy with a score of 82-50 to continue their reign as champions and to earn the right to represent the Ames Lab/ISU region at the U.S. Department of Energy's National Science Bowl® April 26-30 in Washington, D.C. Peter Montag, captain of the Regina team, said about the repeat win, "I am very excited to go to Washington D.C., again and to represent Iowa."

(from left) Regina's Josh Modrick, Peter Montag, Phil Ward and Vanessa Shiu confer on a bonus question during the championship match.

Third place went to Linn-Mar and West Des Moines Valley won fourth place. Other finalists included Urbandale, LeMars, Chariton, Cedar Rapids Jefferson, Iowa City West, Pella, Des Moines Dowling, Johnston and Davenport Assumption.



Bruce Thompson enters scores from the morning's round-robin competition.

Perennial powerhouses were joined in the sweet 16 by newcomer Homeschools of Eastern Iowa, a team of five homeschooled students from Iowa City, Cedar Rapids, and Walker. Although new to Science Bowl competition, the team felt ready. "This is our first Science Bowl, but we are prepared because we have been doing the practice questions since September, and we have been competing in mathematics competitions for many years," said Edward Talmage, Homeschools of Eastern Iowa team member. Ready indeed, the team finished first in its round-robin flight and advanced to the third round of competition before it was eliminated in losses to Regina and Linn-Mar.

The daylong Science Bowl event tests students' knowledge in all areas of science. The Ames Lab/ISU competition was made possible through the generosity of both volunteers and sponsors. Nearly 90 volunteers from Ames Lab and ISU served as moderators, judges, timekeepers and scorekeepers. In addition to Ames Lab and ISU, financial support was offered by the following sponsors: 3M, Rockwell Collins, Dow Corning Foundation, Hach, Pella Corp., HyVee, Baymont Inn and Suites, and Anderson Erickson. ■

~ Breehan Gerleman

More photos from Science Bowl on page 9

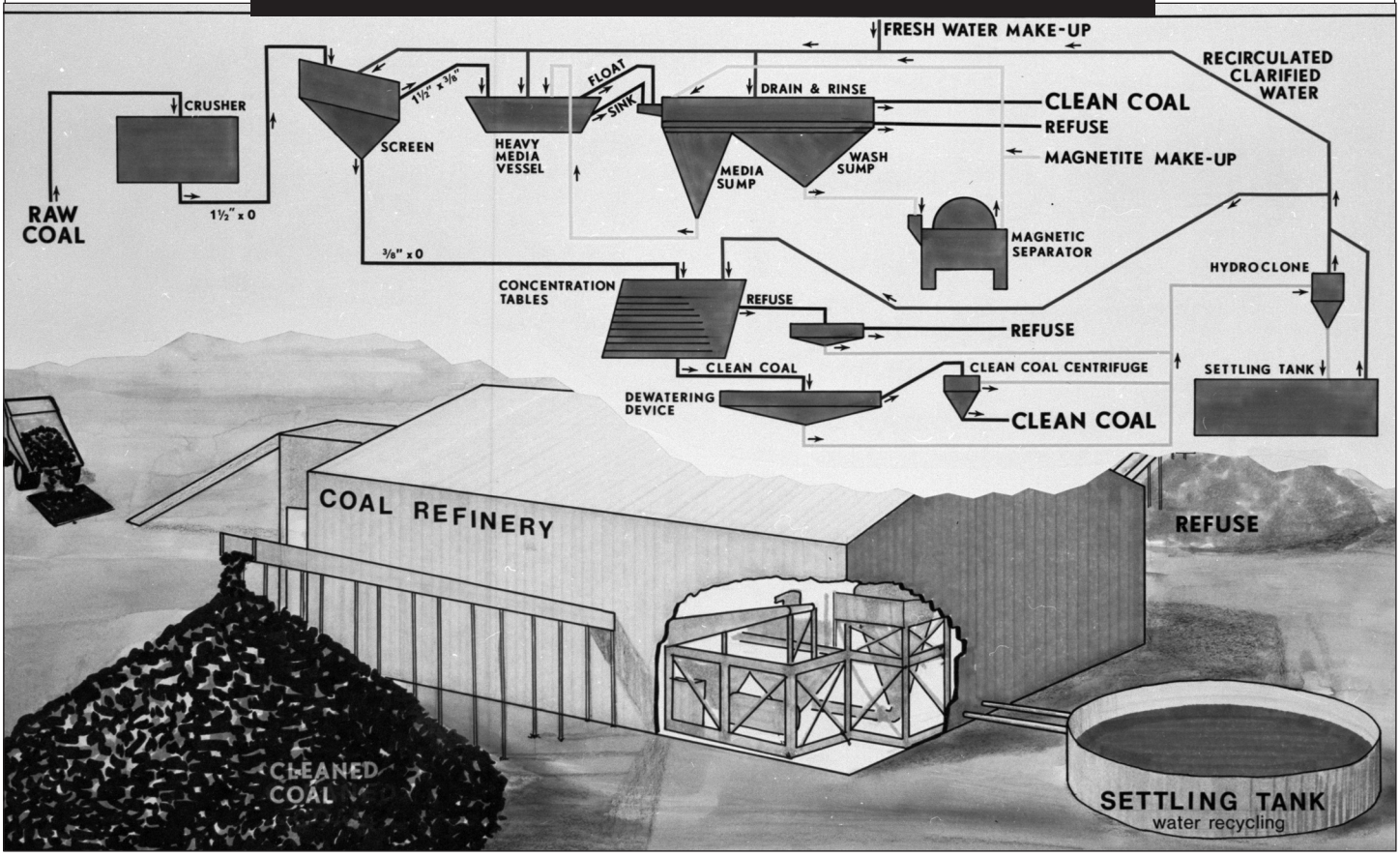
The Xavier High School team keeps safety in mind (and on their T-shirts).

Ames Laboratory – Shaping Science for 60 Years

Ames Laboratory will be 60 years old officially on May 17, 2007. To help celebrate the Lab's achievements, *Insider* will feature a time line of significant Laboratory events that took place in each decade. The time line began with the 1940s in the November 2006 issue of the newsletter and will conclude with the 2000s in the May 2007 issue. The time line is based on historical documents and information taken from the various Ames Lab employee newsletters: *Insider*, *Changing Scene* and *Ames Laboratory News*.

In this installment of the Ames Laboratory time line, we'll examine the 1970s – a time of change for the nation's energy administration as the U.S. Atomic Energy Commission, AEC, evolves into the U.S. Energy Research and Development Administration, ERDA, and finally into the U.S. Department of Energy, DOE. With this evolution comes diversification – some research programs close and new ones open. Federal officials consolidate reactor facilities, leading to the closure of the Ames Laboratory Research Reactor. Ames Lab responds to the closing of the research reactor by putting new emphasis on applied mathematics, solar energy, fossil fuels and pollution control.

1947 – 2007



In 1975, work begins on the coal refining plant located near the Physical Plant on the ISU campus.

1970s

The 1970s – evolution

1970

• Concern about the environment coupled with a new emphasis on pollution control results in the development of a method for detecting minute amounts of organic compounds found in water. More than 50 compounds are identified through mass spectrometry. The unique method becomes widely used within the Environmental Protection Agency and waterworks laboratories.

• The Lab develops a new, more accurate temperature scale for the region from 1 to 20 Kelvin. The measurements are highly precise and eliminate the systematic errors that occur with gas-thermometer and acoustic measurements.

• In October, a technique is developed in which a "white" neutron beam from the Research Reactor core is used in neutron diffraction work. Compared to conventional techniques, the new process is a tenfold improvement in data rates and precision.

Robert Jacobson, senior chemist (right), Carl Quicksall, postdoctoral fellow (center), and Camden Hubbard, graduate assistant, display their neutron diffractometer, which utilizes a polychromatic beam of neutrons to study atomic positional and thermal parameters.

Art D'Silva, assistant chemist, shows the phosphor image intensifer screen that he and Velmer Fassel, deputy director, developed.

1973

• Lab scientists develop a yttrium-gadolinium-terbium image intensifier screen that is brighter than all existing image intensifiers and can significantly reduce exposure to medical X-rays.

1974

• In February, Iowa State's Institute for Atomic Research becomes the Energy and Mineral Resources Research Institute, EMRRI.

• The Ultra Carbon Corp. devotes an entire issue of *Arcs and Sparks* to the accomplishments of Ames Laboratory in the field of analytical chemistry.

• Lab scientists develop a method for tracing the source of explosives used in bombings. The process involves adding "chemical fingerprints" to explosives. After an explosion, these fingerprints, or tags, can then be detected from the debris and traced to the manufacturer.

• In May, the Research Building is officially renamed Spedding Hall in honor of Frank Spedding, the Lab's founder and director for 26 years.

Robert Hansen, director, unveils a portrait of Frank Spedding, the Laboratory's founder and director until 1968, at ceremonies renaming the Research Building the Frank H. Spedding Hall.

1971-72

• Velmer Fassel, deputy director; Richard Kniseley, chemist; and Robert Slack, former graduate assistant, develop a method for determining aluminum, cobalt, chromium, copper, manganese, nickel and vanadium in low- and high-alloy steels by flame emission spectrometry. Using this method, the materials need no prior chemical separation.

• Lab researchers develop a method for preparing pure molybdenum metal in massive form.

• Harley Wilhelm retires from Iowa State after 43 years. He was associate director of Ames Laboratory from 1947-1966.

• Research on tungsten-bronze crystals results in a new application in electrochemistry. When used as electrodes, the crystals are sensitive to oxygen and are potentially useful as simple, inexpensive analyzers of river and lake water.

• Researchers at Ames Lab develop a technique for direct ultra-trace analysis of mercury in air, water, fish and soils.

• Under joint sponsorship of the AEC and the Environmental Protection Agency, the Lab develops a one-step induction melting process for removing copper, tin and chromium from automotive scrap, thereby yielding reclaimed steel pure enough for direct reuse.

More than 100 colleagues turn out to honor Harley Wilhelm and his wife, Orpha, on the occasion of his retirement from the university after a career spanning 43 years.

1975

• In January, the U.S. Atomic Energy Commission becomes the U.S. Energy Research and Development Administration, ERDA.

• In April, the Iowa Academy of Sciences honors Frank Spedding and Robert Hansen for their accomplishments.

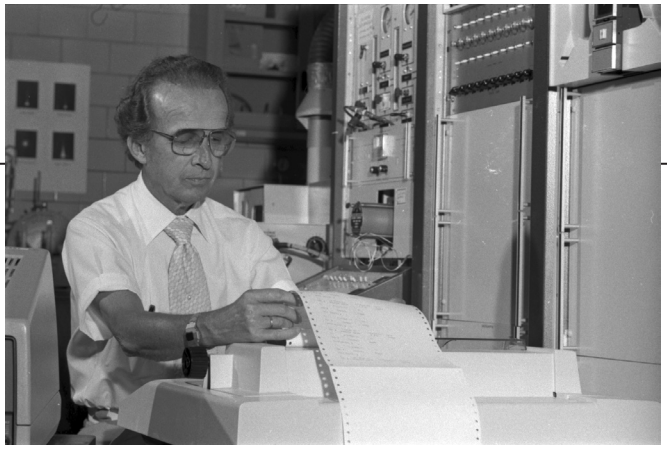
• Ames Laboratory Deputy Director Velmer Fassel and his research group develop a new, highly sensitive analytical system known as inductively coupled plasma-atomic emission spectroscopy, ICP-AES. The new technique can rapidly and simultaneously detect up to 40 different trace metals in a small sample.

• In conjunction with NASA's Langley Research Center, Ames Lab scientists continue working on a project aimed at producing high-purity metals in earth orbit. The Vacuum Assisted Metal Purification in Space, or VAMPS, project will test the effects of zero gravity and low pressures on metal purification efforts. The experiment will be flown on one of NASA's space shuttles.

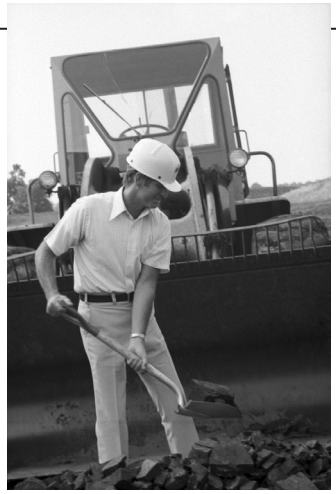
• Karl Gschneidner, Dale McMasters and Jim Holl use the floating zone crystal preparation technique to produce rare-earth iron single crystals for the Naval Surface Weapons Center, NSWC. These highly purified alloys have applications as high-power transducers, permanent magnets, acoustic delay lines, micropositioning devices and ultrasonic devices. NSWC reports that one single crystal alloy prepared by Ames Lab was found to exhibit the largest magnetomechanical coupling factor ever measured.

• During dedication ceremonies, Governor Robert Ray shovels the first coal to open Ames Laboratory's Iowa Coal Project Demonstration Mine No. 1.

• Mechanical coal-washing equipment is being assembled for the three-quarter-million-dollar experimental coal-cleaning plant to be constructed on the ISU campus. The facility is part of the $3 million Iowa Coal Research Project, which is administered by EMRRI and funded by the state. The project leader is Ray Fisher. The finished plant will process about 70 tons of clean coal per hour.



Velmer Fassel, deputy director, examines an analytical data printout from an inductively coupled plasma-atomic emission spectrometer.

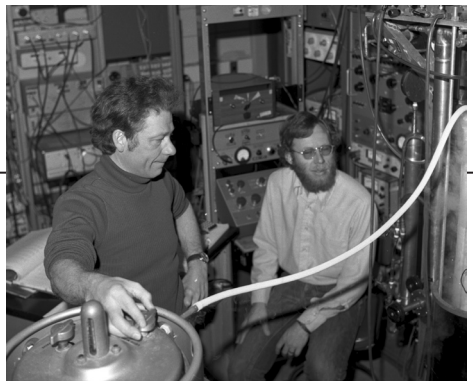


Gov. Robert Ray shovels the first coal to open the Iowa Coal Project Demonstration Mine No. 1

Personnel prepare for the May 6 dedication of the coal-cleaning plant.

1976

• Lab engineers develop and install a plant-protection monitoring system throughout Ames Lab facilities. It is the first state-of-the-art, electronic system to be installed in an ERDA laboratory that combines fire surveillance with physical security and environmental monitoring.
• Lab scientists develop a method for removing carbon monoxide from gases using a terbium oxide catalyst to turn carbon monoxide into carbon dioxide.
• Lab researchers Doug Finnemore, John Verhoeven and Ed Gibson develop a new method for preparing materials that can improve the performance of superconducting cable by making the filament size at least ten times smaller than the present commercial thickness.
• Dedication of the Iowa Coal Project's $75,000 coal-cleaning plant is scheduled for May 6, coinciding with the beginning of ISU's VEISHEA weekend activities.
• Researchers at the Ames Lab develop a wet oxidation method for removing sulfur from coal.
• Ames Lab scientists develop a technique for recovering alumina from coal fly ash.
• Researchers begin producing ductile superconducting composites.



(left) Doug Finnemore, senior physicist, and Cary Spencer, research assistant, work with a temperature-controlling apparatus to measure critical currents in laminar lead-cadmium composite superconductors

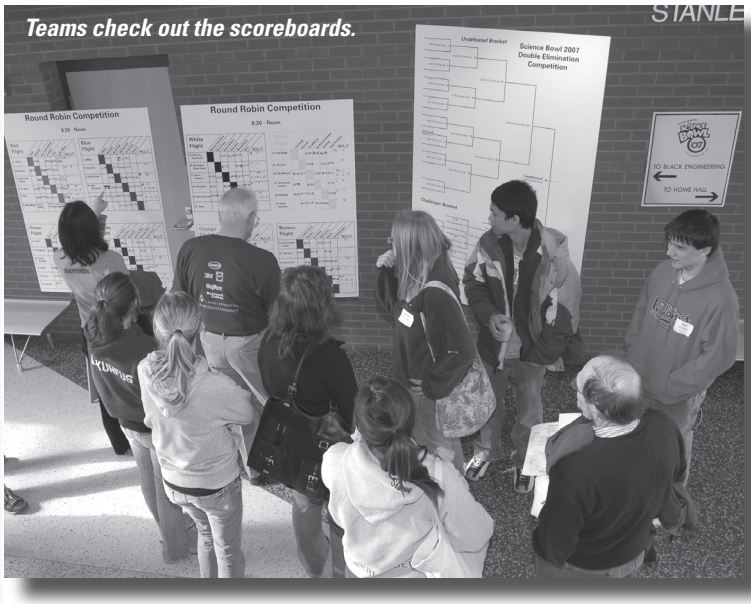
1977-79

• Explosions rock 22 Iowa grain elevators from 1958 to 1975, killing 13 people. The increased frequency and severity of grain dust catastrophes prompt the Iowa Legislature to authorize an investigation into the causes of the explosions through Ames Lab's Energy and Mineral Resources Research Institute.
• In October, the U.S. Energy Research and Development Administration becomes the U.S. Department of Energy, USDOE.
• At 11 p.m. on Dec. 31, 1977 the Research Reactor is shut down because of realignments made by DOE in program support. The dismantling of the reactor will take three years.
• A new analytical technique developed at Ames Lab will enable scientists to quickly detect many potential carcinogens associated with coal combustion processes. The new technique uses X-ray excited optical luminescence and is used to characterize polynuclear aromatic hydrocarbons, many of which are suspected of causing cancer in humans.
• TRISTRAN, an on-line isotope separator developed at Ames Laboratory in 1966, moves to Brookhaven National Laboratory in New York, where it will become the focus of a national user facility for researchers studying a wide range of fission products.
• A liquid-filled, semitransparent solar heating module called a "transwall" is developed at Ames Laboratory by John McClelland. The module can both store and transmit solar energy.
• Ames Laboratory researchers refine the process for recovering alumina to include reclamation of iron, silicon and titanium from coal fly ash.
• Ames Laboratory becomes a DOE Lead Laboratory in environmental control technology.

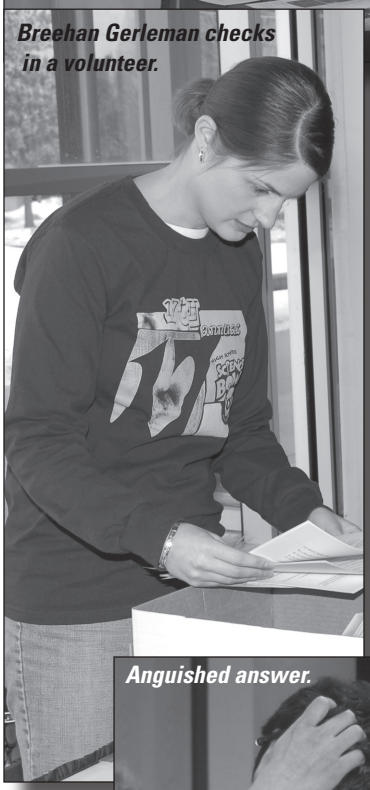
Harry Svec (left) and Frank Spedding stand by the showcase Svec designed to display the reproductions of Spedding's commemorative medals.

2007 Science Bowl in Photos

LAS was one of several exhibitors.



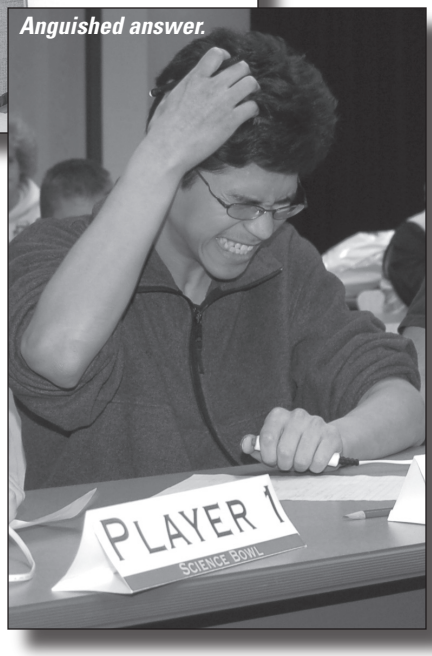
Teams check out the scoreboards.



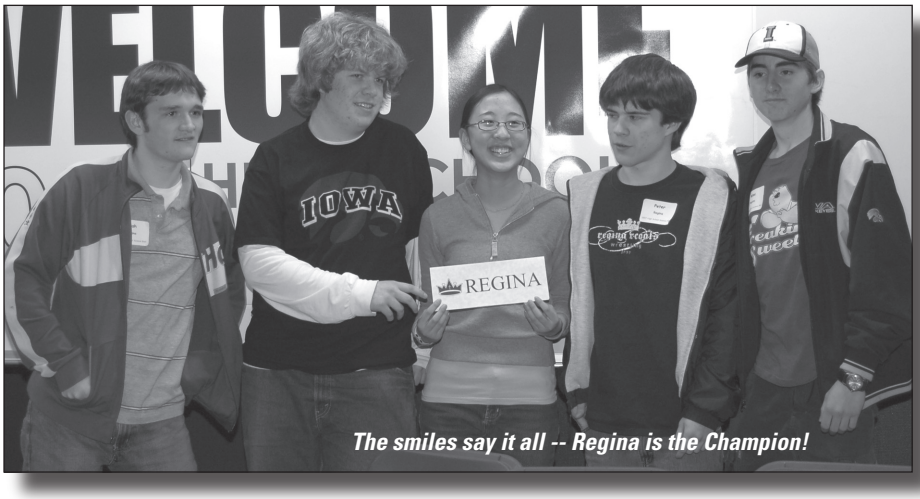
Breehan Gerleman checks in a volunteer.

Central Academy team members confer during the championship match.

The championship match in Hoover Auditorium.



Anguished answer.



The smiles say it all -- Regina is the Champion!

THE LINK

IPRT works for Iowa

1987 20 YEARS 2007

February 2007

News from the Institute for Physical Research and Technology

Dynamic Speakers, New C6 Highlight VRAC Event

Learn about the developing relationships that spark entrepreneurial activities and advance emerging technologies at the Emerging Technologies Conference 2007, to be held April 25-27 in Howe Hall on the Iowa State University campus. The conference events are free and open to the public.

In addition to IPRT's Virtual Reality Applications Center, ETC2007 is sponsored by Iowa State University's Center for Computational Intelligence, Learning and Discovery; NFS-IMI Combinatorial Science and Materials Collaboratory; the Human Computer Interaction Graduate Program; the Information Assurance Center; the Information Infrastructure Institute; Office of the Vice President for Research & Economic Development; and the Pappajohn Center for Entrepreneurship.

Norman

ETC2007 begins on Wednesday, April 25, with graduate students in Human Computer Interaction hosting the fourth annual "HCI Forum: Designing Interaction 2007." The keynote speaker is Don Norman, known as the "champion of user-centered design."

On Thursday, VRAC hosts public tours of the newly upgraded C6. The new C6 will be the highest resolution virtual reality room in the world. Also on Thursday is a "Conversation with Neal Stephenson." Stephenson is the author of the bestselling *Baroque Cycle* as well as the novels *Cryptonomicon*, *The Diamond Age*, *Snow Crash*, and *Zodiac*. Thursday night features IgniteIT, a networking opportunity for Iowa's educational community, technology enthusiasts, IT professionals, students and entrepreneurs, artists and nonprofits.

Stephenson

Kawasaki

Friday is "Industry Innovation Day." The keynote speaker is Guy Kawasaki, whose presentation is meant to inspire entrepreneurial thinking. In the afternoon, Raghu Ramakrishnan, a vice-president and research fellow at Yahoo!, will speak on community systems. Industry leaders will then talk about entrepreneurial activities and the development of emerging technologies.

Ramakrishnan

ETC2007 Schedule

Wednesday, April 25

HCI Forum: Designing Interaction 2007

9:00 to 10:30 a.m. Tech Demos & Poster Presentations

10:30 to 11:30 a.m. Taysheng Jeng: Spaces that Sense, Think and Respond

1:00 to 2:30 p.m. Don Norman: Cautious Cars and Cantankerous Kitchens

2:30 to 4:00 p.m. Tech Demos & Poster Presentations

4:00 to 5:00 p.m. Student Research Presentations

Thursday, April 26

C6 Grand Opening

9:00 a.m. to 4:00 p.m. C6 Public Tours (for reservations, call 294-3092)

9:00 a.m. to 4:00 p.m. Tech Demos & Poster Presentations

11:00 a.m. to 12:00 p.m. Qi Zhou: From CAD to iAD

2:00 to 3:00 pm Melinda Cerney Knight, Microsoft: Engineering the User Experience in Windows Vista

3:00 to 4:00 p.m. Usability Relays

4:00 to 5:00 p.m. A Conversation with Neal Stephenson

7:00 p.m. IgniteIT: an evening of entrepreneurial networking (ISU Research Park Rotunda)

Friday, April 27

Industry Innovation Day

9:30 to 11:15 a.m. Guy Kawasaki: The Art of the Start

1:30 to 2:30 p.m. Raghu Ramakrishnan: Community Systems: The World Online

1:30 to 5:00 p.m. Poster Sessions & Research Demos

3:00 to 5:00 p.m. Industry Leaders

For more details and updates, go to www.vrac.istate.edu/ect2007/

Breakfast Touts IPRT's Work with Iowa Companies

IPRT held its annual Legislative Breakfast February 8 at the Iowa State Capitol. Almost 50 Iowa representatives and senators stopped in to learn how IPRT helps Iowa companies. IPRT receives an appropriation from the state of Iowa to assist Iowa companies.

On hand were representatives from seven companies: International Water Management Systems, Washington; FOX Engineering, Ames; Hansaloy Corp., Davenport; Iowa Egg Council, Des Moines; John Deere Foundry, Waterloo; Tire Environmental Services, Inc., Muscatine; and Van Beek Natural Science, L.L.C., Orange City. Iowa State University was represented by John Brighton, vice president for research and economic development, and Andy Baumert, government relations. IPRT participants included Tom Barton, Alan Goldman, Iver Anderson, Stacy Joiner, Dave Utrata, Rick Lopez, Paul Berge, Kim Bentley, Brian Muff, Steve Karsjen and Robert Mills.

Rep. Lisa Heddens of Ames listens to IPRT's Paul Berge (left) explain how he helped Steve Wright of Hansaloy with a materials problem involving bread-cutting blades.

Andy Baumert (left) of ISU government Relations talks with Rep. Dwayne Alons (right) of Hull and Steve Karsjen of IPRT Public Affairs.

Growing Iowa with IPRT

The same day as the IPRT Legislative Breakfast, IPRT also promoted its capabilities during the "Grow Iowa Day at the Capitol" event held by Professional Developers of Iowa. IPRT took this opportunity to show how it can help develop Iowa's economy through its technical assitance, contract research and start-up assistance services. Particpants included Stacy Joiner and Dave Utrata of IPRT Company Assistance and Robert Mills of IPRT Public Affairs.

State Sen. David Beall spoke to IPRT's Stacy Joiner to learn more about how IPRT can help companies in his district during the "Grow Iowa Day at the Capitol" held in February.

John Hays (left) of International Water Management Systems explains how his water purification system works to Sen. Becky Smith of Fairfield and Sen. James Seymour of Woodbine. IPRT set up a contract research project with Iowa State scientists to evaluate the company's technology. The product may help reduce disease in countries with bad drinking water.

The IPRT LINK is published four times per year by the Institute for Physical Research and Technology at Iowa State University. Editor: Robert Mills. Please direct questions and comments to: Robert Mills, IPRT, 111 TASF, Iowa State University, Ames, IA 50011; rmills@iastate.edu.

Free 50s Dance Lessons

The Bop, the Stroll, the Swing, the Hand Jive ... whatever ... you'll want to dance at the Lab's 60th anniversary bash on May 24. Richie Lee and the Fabulous 50s, will be "killing" us with their "wowsville" sounds! If you can't dance – cool it; you can take some free 50s dance lessons before making the anniversary scene. Here's the scoop, Daddy-O.

Dates: Mondays and Wednesdays in April, beginning on Monday, April 2, and running through Wednesday, April 25.

Time: Noon to 1 p.m.

Place: 205 TASF

Instructors: Mary Woodruff and Sarah Carney, members of the Cyclone Swing Society (SWING).

Volunteers Needed for Middle School Science Bowl

The Ames Laboratory/ISU Middle School Science Bowl will be Saturday, April 14. Volunteers are needed to serve as moderators, judges, timekeepers and scorekeepers.

All volunteers will receive a free Science Bowl T-shirt and lunch on the day of competition.

For information or to volunteer, contact Breehan Gerleman, Ames Lab Public Affairs, 4-9750, breehan@ameslab.gov.

Retirement plan changes

Information sessions about changes that affect Ames Lab employee participation in the TIAA-CREF retirement plan will be held March 5-7. Attend one of the one-hour sessions listed below to learn more about the switch to the new Ames Laboratory Defined Contribution Retirement Plan:

Monday, March 5, 5 p.m.
3538 Memorial Union

Tuesday, March 6, 10 a.m.
301B Spedding Auditorium

Tuesday, March 6, noon
301B Spedding Auditorium

Wednesday, March 7, noon
310B Spedding Auditorium

Wednesday, March 7, 2 p.m.
301B Spedding Auditorium

For more information about the information sessions, please contact Ames Lab Human Resources at 4-2680.

INSIDER
Volume 18 / Number 2/ February 2007

Ames Lab *Insider* is published 11 times a year for the employees of the Ames Laboratory by the Office of Public Affairs and Information. Ames Laboratory is operated by Iowa State University (ISU) for the U.S. Department of Energy (DOE) under Contract DE-AC02-07CH11358 and is part of the Institute for Physical Research and Technology (IPRT) consortium of fundamental and applied research centers.

Editor Saren Johnston
Layout Kerry Gibson

Address comments to:
Editor, ***INSIDER***
111 TASF
Ames, IA 50011-3020
515/294-9557
FAX 515/294-3226

Address correction requested
P-208-9

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